# **Internal Revenue Service**

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Department of the Treasury Washington, DC 20224

[Third Party Communication:

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Date:

November 30, 2006

# Legend:

Taxpayer =

Group =

Company =

Agency =

Plant 1 =

Plant 2 =

b =

c =

Year 1 =

Year 2 =

Date =

State =

\$<u>Q</u> =

\$R =

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\$<u>T</u>=

\$<u>W</u> =

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\$<u>Z</u> =

Dear :

This letter is in response to your request for a ruling dated July 13, 2005, regarding the applicability of § 172(f) of the Internal Revenue Code to that portion of Taxpayer's consolidated net operating loss for Year 1 attributable to costs incurred to store spent nuclear fuel assemblies, and to remove retired steam generators and nuclear reactor vessel heads. Specifically, you request rulings that (1) the portion of Taxpayer's consolidated net operating loss for Year 1 attributable to costs associated with the fuel storage facilities constitutes a specified liability loss under § 172(f), and (2) the portion of Taxpayer's consolidated net operating loss for Year 1 attributable to costs incurred to remove retired steam generators and retired reactor vessel heads constitutes a specified liability loss under § 172(f).

# **FACTS**

Taxpayer, a State corporation, is the parent of an affiliated group of corporations (Group) that file United States federal income tax returns on a consolidated basis. Taxpayer files its federal income tax returns on a calendar-year basis and uses the accrual method of accounting. Group is an integrated provider of energy and energy services throughout the United States and overseas.

Company, a division of Taxpayer that generates, transmits, distributes, and sells electricity, owns interests in b nuclear power plants. To operate a nuclear power plant in the United States, the plant owner must first obtain an operating license from the Nuclear Regulatory Commission ("NRC"), and comply with all applicable federal and state regulatory requirements. A major by-product of nuclear power generation is spent fuel. As described further below, Company uses both "wet" and "dry" storage methods for its spent fuel assemblies. Company has incurred costs related to the storage of spent nuclear fuel, and costs to remove retired steam generators and retired reactor vessel heads. Federal law requires that Company decommission its nuclear power plant following its permanent cessation of operations.

Group filed its Year 1 Form 1120, United States Corporation Income Tax Return, on Date and reported a consolidated net operating loss of  $\S Z$ . A portion of Taxpayer's loss resulted from certain costs, described below, attributable to Plant 1 and Plant 2. Taxpayer seeks a ruling that the portion of the consolidated net operating loss attributable to nuclear decommissioning costs is a specified liability loss as defined in  $\S$  172(f).

# SPENT FUEL ASSEMBLY COSTS

Taxpayer, which must safely store spent nuclear fuel because it remains radioactive, entered into an agreement with Agency to dispose of its spent nuclear fuel in a permanent repository owned and operated by Agency. However, Agency does not anticipate accepting spent fuel until Year 2. As a result, Taxpayer has no alternative other than to store the spent fuel assemblies at its own plant sites. Although Taxpayer's plants have temporary wet storage for spent nuclear fuel, such facilities are reaching capacity. Thus, Taxpayer has constructed independent spent fuel storage installations (dry storage facilities for spent fuel) at each of its nuclear power plants. The dry storage systems consist of either thick wall or thin wall metal canisters.

Taxpayer incurred costs attributable to the canisters at Plant 1 and Plant 2. It deducted these costs under § 165. Although Taxpayer purchases the canisters in bulk, the only costs at issue in this request are the costs to purchase canisters that actually were loaded with spent nuclear fuel in Year 1. Taxpayer also incurred operating and maintenance expenses associated with the canisters, ongoing handling, security, and storage of spent fuel. It deducted these costs under § 162. Taxpayer capitalized the costs of the independent spent fuel storage installations, including fuel handling equipment, monitoring equipment, spent fuel racks, components, and wet storage assets.

#### STEAM GENERATOR REMOVAL COSTS

In Year 1, Taxpayer completed the process of removing and replacing steam generators at Plant 1 that it had begun six years earlier. The costs at issue in the subject ruling request are the costs incurred for the removal of the old steam generators in Year 1. Taxpayer capitalized the costs of purchasing and installing the new steam generators, treating the installation costs as part of the purchase costs. Taxpayer treats the replacement steam generators as separate, identifiable assets for regulatory and tax accounting purposes.

Taxpayer accomplished the removals one nuclear unit at a time. The two steam generators in each nuclear unit were removed at the same time. Although the nuclear unit was inoperable during the repair, the remainder of the plant operated at a reduced capacity.

# REACTOR VESSEL HEAD REMOVAL COSTS

Taxpayer discovered cracks in its nuclear reactor vessel heads during a routine inspection and began replacing them. It completed the process in Year 1. The costs at issue in the subject ruling request are the costs incurred in Year 1 attributable to the removal of the retired Plant 1 reactor vessel heads. Taxpayer treated the installation costs as part of the costs of purchasing the new reactor vessel heads, and it treats the replacement reactor vessel heads as separate, identifiable assets for regulatory and tax accounting purposes. This project was unrelated to the steam generator removal project.

# SUMMARY OF COSTS

Taxpayer incurred the following expenses relating to Plant 1 and Plant 2 during Year 1:

Reactor vessel heads removal costs – \$\overline{Q}\$
Steam generator removal costs – \$\overline{R}\$
Canister costs at Plant 1 - \$\overline{S}\$
Canister costs at Plant 2 - \$\overline{T}\$
Spent fuel storage depreciation - \$\overline{W}\$
Spent fuel maintenance costs - \$\overline{X}\$

LAW AND ANALYSIS—ISSUE 1: ARE THE COSTS RELATING TO ASSETS ACQUIRED BY COMPANY TO STORE SPENT NUCLEAR FUEL ASSEMBLIES REMOVED FROM PLANT 1 AND PLANT 2 DEPRECIABLE UNDER § 167 (AS COMPUTED UNDER § 168)?

Section 263(a) provides that no deduction is allowable for capital expenditures. Examples of capital expenditures are provided in § 1.263(a)-2 of the Income Tax Regulations and include, among other things, the cost of acquisition, construction, or erection of buildings, machinery and equipment, furniture and fixtures, and similar property having a useful life substantially beyond the taxable year.

Section 167(a) provides that there shall be allowed as a depreciation deduction a reasonable allowance for the exhaustion, wear and tear (including a reasonable allowance for obsolescence) of property used in the trade or business or held for the production of income.

The depreciation deduction provided by § 167(a) for tangible property placed in service after 1986 generally is determined under § 168. This section prescribes two methods of accounting for determining depreciation allowances. One method is the general depreciation system in § 168(a) and the other method is the alternative depreciation system in § 168(g). Under either depreciation system, the depreciation deduction is computed by using a prescribed depreciation method, recovery period, and convention.

# **CONCLUSION—ISSUE 1**

Assets such as spent fuel racks, wet storage assets, and other handling equipment used to store the spent fuel (in either a wet or dry state) prior to transfer to another site are property having a useful life substantially beyond the taxable year. As such, they are subject to depreciation under § 167, as computed under § 168.

LAW AND ANALYSIS—ISSUE 2: DO THE COSTS RELATING TO ASSETS ACQUIRED BY COMPANY TO STORE SPENT NUCLEAR FUEL ASSEMBLIES REMOVED FROM PLANT 1 AND PLANT 2 CONSTITUTE "DECOMMISSIONING COSTS" UNDER § 1.468A-1(b)(5)?

Section 1.468A-1(b)(5) provides that the term "nuclear decommissioning costs" or "decommissioning costs" means all otherwise deductible expenses incurred in connection with the entombment, decontamination, dismantlement, removal and disposal of the structures, systems and components of a nuclear power plant that has permanently ceased the production of electric energy. That section further provides that the term nuclear decommissioning costs is defined broadly to include expenses incurred before, during, and after the actual decommissioning process of the nuclear power plant that has ceased operations.

The costs described above are all incurred in connection with the entombment, decontamination, dismantlement, removal, and disposal of the structures, systems, and components of a nuclear power plant. Further, each of the assets used in connection with the storage, maintenance or monitoring of the spent fuel will not be otherwise used by Taxpayer or another party. Thus, those assets are irrevocably committed to the process of decommissioning. Similarly, the retired steam generators and reactor vessel heads taken from Plant 1 are not being reused and are, therefore, irrevocably committed to the process of decommissioning.

# CONCLUSION—ISSUE 2

The costs relating to assets acquired by Company to store spent nuclear fuel assemblies removed from Plant 1 and Plant 2 are decommissioning costs within the meaning of § 1.468A-1(b)(5).

LAW AND ANALYSIS—ISSUE 3: ARE THE (i) COSTS OF PURCHASING CANISTERS FOR STORING SPENT NUCLEAR FUEL, (ii) COSTS RELATED TO THE ONGOING, HANDLING, MAINTENANCE, SECURITY, AND STORAGE OF SPENT FUEL IN INDEPENDENT SPENT FUEL STORAGE INSTALLATION FACILITIES, (iii) COSTS INCURRED TO REMOVE STEAM GENERATORS; AND (iv) COSTS INCURRED TO REMOVE REACTOR VESSEL HEADS DEDUCTIBLE UNDER §162(a) or § 165?

# SPENT NUCLEAR FUEL ASSEMBLY COSTS

# **CANISTER COSTS**

Section 165(a) provides that there shall be allowed as a deduction any loss sustained during the taxable year and not compensated for by insurance or otherwise. Section 1.165-1(b) provides, in relevant part, that to be allowable as a deduction under § 165(a), a loss must be evidenced by a closed and completed transaction, fixed by identifiable events, and actually sustained during the taxable year. When the loss arises from the permanent withdrawal of depreciable property from use in a trade or business or in the production of income, § 1.165-2(c) cross-references § 1.167(a)-8(a), which permits, in part, a loss from physical abandonment of retired property. Section 1.167(a)-8(a)(4) provides that in order to qualify for the recognition of loss from physical abandonment, the intent of the taxpayer must be irrevocably to discard the asset so that it will neither be used again by him nor retrieved by him for sale, exchange, or other disposition.

Property interests may be abandoned by a taxpayer for federal income tax purposes even if the taxpayer does not transfer those property interests to another party. For example, Rev. Rul. 56-599, 1956-2 C.B. 122, concludes that an abandonment occurred when the taxpayer filled and sealed a water well excavation. *See also Seminole Rock & Sand Co. v. Commissioner*, 19 T.C. 259 (1952), acq. 1953-1 C.B. 6 (taxpayer abandoned an asphalt plant when it dismantled the plant and moved it to another location without reassembling it); *A. J. Industries, Inc. v. United States*, 503 F.2d 660 (9<sup>th</sup> Cir. 1974) (mine abandoned when the taxpayer stopped working it, reduced its work force and maintenance budget, sold the mine equipment for salvage, and had its board of directors vote to abandon the mine); *Hanover v. Commissioner*, T.C. Memo. 1979-332 (hotel was abandoned when the taxpayer locked and boarded the building, placed barricades around it, cut off its utilities, terminated its insurance, discontinued its maintenance, and made no efforts to sell or lease it).

According to the above authorities, property interests can be abandoned by a taxpayer for federal income tax purposes even if the taxpayer does not transfer those property interests to another party. Here, Taxpayer is required to safely store radioactive spent fuel on site until Agency facility is operational. Once Taxpayer loads the canisters with spent fuel, it will never use them again for any purpose. The canister costs at issue in this ruling request are the costs of the canisters that were purchased in Year 1. These

canisters were filled with spent fuel and placed in the independent spent fuel storage installation facilities. Thus, they were both placed in service and abandoned during the Year 1 taxable year.

# CONCLUSION—CANISTER COSTS

Taxpayer has abandoned the canisters and, therefore, is entitled to a loss deduction pursuant to § 165(a).

# MONITORING COSTS

Sections 162(a) and 1.162-1 generally allow a deduction for all the ordinary and necessary expenses paid or incurred during the taxable year in carrying on a trade or business.

The radioactive nature of the spent fuel assemblies mandates that Taxpayer continue to monitor the physical security of the canisters and to monitor radiation levels of the loaded canisters. We have previously considered the deductibility of ongoing monitoring of other types of waste storage facilities. For example, Rev. Rul. 98-25, 1998-1 C.B. 998, provides that the cost of monitoring underground waste storage tanks is deductible pursuant to § 162(a), in part, because the tanks are used once and sealed indefinitely, like the canisters in the instant situation. See also Rev. Rul. 94-38, 1994-1 C.B. 35 (ongoing groundwater treatment expenditures are deductible under § 162(a)).

#### CONCLUSION—MONITORING COSTS

The ongoing monitoring costs associated with the loaded and sealed canisters are deductible pursuant to § 162(a).

# STEAM GENERATOR AND REACTOR VESSEL HEAD REMOVAL COSTS

Section 263A generally requires taxpayers that produce real or tangible personal property to capitalize direct material costs, direct labor costs, and indirect costs that are properly allocable to the produced property. Section 263A(g)(1) provides that, for purposes of § 263A, the term "produce" includes construct, build, install, manufacture, develop, or improve. Under § 1.263A-1(e)(3)(i), indirect costs are allocable to produce property under § 263A when the costs directly benefit or are incurred by reason of the performance of production activities.

The costs of removing an asset have been historically allocable to the removed asset and, thus, generally deductible when the asset is retired and the costs are incurred. See § 1.165-3(b); § 1.167(a)-1(c); § 1.167(a)-11(d)(3)(x); Rev. Rul. 2000-7, 2000-1 C.B. 712 (costs of removing telephone poles are not required to be capitalized under § 263(a) or § 263A as part of the replacement asset). See also Rev. Rul. 74-455, 1974-2

C.B. 63 (change in method of accounting to currently deduct removal costs and to include salvage proceeds in income is appropriate); Rev. Rul. 75-150, 1975-1 C.B. 73 (net salvage amount cannot be less than zero where deductible removal costs exceed salvage value).

Under the above authorities, the cost of removing the steam generators is deductible as a loss under § 165(a) if the steam generators are separate assets. Taxpayer treats its steam generators as separate assets for regulatory and financial accounting purposes. Factually, the steam generators serve an integrated, but separate function within a nuclear unit. Each nuclear unit consists of c steam generators and a reactor vessel. The reactor vessel is the mechanism that heats and pressurizes water. The water then passes into the steam generators, where it is converted to steam, which is used to push the blades of a turbine. As the turbine blades begin to spin, a magnet inside the generator also turns to produce electricity. Accordingly, the steam generators perform a separate, but integrated function within each nuclear unit in the production of electricity.

Likewise, the cost of removing the reactor vessel heads is also deductible as a loss under § 165(a) if they are separate assets. The reactor vessel heads serve a different function from the reactor vessels themselves. The reactor vessel plays a passive role as the combustion chamber within which the constituent parts of the atomic reaction come together. The reactor vessel head, on the other hand, is a complex system that includes a number of sophisticated moving parts whose role is to control the speed of the nuclear reaction occurring within the reactor vessel. Further, the reactor vessel heads have a shorter useful life than the reactor vessels, as evidenced by the fact that they had to be replaced in Year 1 while the reactor vessels were still in operation. Finally, Taxpayer treats the reactor vessel heads as separate assets for regulatory and financial accounting purposes.

# CONCLUSION—STEAM GENERATOR AND REACTOR VESSEL HEAD REMOVAL COSTS

Based on the facts and circumstances outlined above, both the steam generators and the reactor vessel heads are separate assets, and the removal costs should be allocated to the removed assets and deducted pursuant to § 165(a) when the assets are permanently withdrawn from use in Taxpayer's business.

LAW AND ANALYSIS—ISSUE 4: DO THE COSTS DESCRIBED IN ISSUES 1 AND 3 QUALIFY UNDER § 172(f) FOR TREATMENT AS A SPECIFIED LIABILITY LOSS?

Section 172(a) allows as a deduction for a taxable year an amount equal to the aggregate of (1) the net operating loss carryovers to such year, plus (2) the net operating loss carrybacks to such year. With certain modifications, § 172(c) defines a

net operating loss as the excess of the deductions permitted by Chapter 1 of the Code over the gross income.

Section 172(b)(1)(A) provides that, generally, a net operating loss for any taxable year is carried back to each of the 2 taxable years preceding the taxable year of the loss and carried forward to each of the 20 taxable years following the year of the loss.

Section 172(b)(1)(C) provides that in the case of a taxpayer that has a specified liability loss (as defined in § 172(f)) for a taxable year, such specified liability loss shall be a net operating loss carryback to each of the 10 taxable years preceding the taxable year of such loss.

Section 172(f)(1)(B)(i) defines a specified liability loss, in part, as any amount taken into account in computing the net operating loss for the taxable year and that is allowable as a deduction under Chapter 1 of the Code (other than §§ 468(a)(1) or 468A(a)) which is in satisfaction of a liability under a federal or state law requiring the decommissioning of a nuclear power plant (or any unit thereof).

Section 172(f)(1)(B)(ii) provides that a liability is a specified liability loss only if (I) the act (or failure to act) giving rise to such liability occurs at least 3 years before the beginning of the taxable year, and (II) the taxpayer used an accrual method of accounting throughout the period or periods during which such act (or failure to act) occurred.

Section 172(f)(3) allows that portion of a specified liability loss which is attributable to amounts incurred in the decommissioning of a nuclear power plant (or any unit thereof) to be carried back to each of the taxable years during the period that begins with the year the plant (or unit thereof) was placed in service, and ending with the taxable year preceding the loss year.

As discussed above, the costs described herein are nuclear decommissioning costs under § 1.468A-1(b)(5). Thus, such costs are amounts incurred in the decommissioning of a nuclear power plant under § 172(f). In addition, such costs are, as explained above, "deductible under chapter 1 of the Code" as required by § 172(f). Further, the costs were incurred to satisfy a liability under federal law since they satisfy Company's liabilities under NRC regulations governing operators of nuclear power plants and federal energy regulations requiring the proper and safe storage of spent fuel assemblies. The costs were incurred during the Year 1 tax year, which was more than 3 years after the licenses to operate the plants were granted and the liabilities arose. Finally, the subject costs were taken into account in computing Group's net operating loss for Year 1.

**CONCLUSION—ISSUE 4** 

All of the § 172(f) requirements related to specified liability loss have been satisfied. Therefore, the portion of Taxpayer's consolidated net operating loss attributable to, as described above, canisters for storing spent fuel, the ongoing monitoring and depreciation of storage facilities, and the removal of steam generators and reactor vessel heads qualify under § 172(f) for treatment as a specified liability loss.

# **CAVEATS**

A copy of this letter must be attached to any income tax return to which it is relevant. We enclose a copy of the letter for this purpose. Also enclosed is a copy of the letter ruling showing the deletions proposed to be made in the letter when it is disclosed under § 6110 of the Internal Revenue Code.

Pursuant to a power of attorney on file in this office, a copy of this letter has been furnished to your authorized representative.

This ruling is directed only to the taxpayer requesting it. Section 6110(k)(3) provides that it may not be used or cited as precedent.

Except as expressly provided herein, no opinion is expressed or implied concerning the tax consequences of any aspect of any item discussed or referenced in this letter.

Sincerely,

Michael J. Montemurro Branch Chief Office of Associate Chief Counsel (Income Tax & Accounting)